

(19)



JAPANESE PATENT OFFICE

PATENT ABSTRACTS OF JAPAN

(11) Publication number: 09087694 A

(43) Date of publication of application: 31.03.97

(51) Int. Cl      **C11D 17/06**  
                  **C11D 1/72**  
                  **C11D 1/74**  
                  **C11D 3/20**  
                  **C11D 3/26**  
                  **C11D 3/37**

(21) Application number: 07249192

(22) Date of filing: 27.09.95

(71) Applicant: LION CORP

(72) Inventor: HORIE HIROMICHI  
                  TAKAHASHI YOSHIHARU  
                  IWABUCHI HIROYUKI  
                  ABE SEIJI

**(54) GRANULAR NONIONIC DETERGENT  
COMPOSITION AND ITS PRODUCTION**

(57) Abstract:

PROBLEM TO BE SOLVED: To obtain a granular nonionic detergent composition showing excellent fluidity of detergent particles at an elevated temperature under a high pressure and good dissolving properties, by granulating a mixture of a nonionic surface active agent, a nonionic gelling agent and an oil-absorbing carrier under stirring or by kneading and crushing them followed by granulation.

SOLUTION: A nonionic surfactant (for example, polyoxyalkylene ether), a nonionic gelling agent (for example, 12-hydroxystearic acid) and an oil-absorbing carrier (for example, amorphous silica) are blended, and in addition, an inorganic cleansing builder (for example, sodium pyrophosphate), an organic cleansing builder (for example, polyacrylate salt), a fluorescent agent (for example, bis(sulfostyryl)biphenyl salt), an enzyme such as protease, a bleaching agent such as a percarbonate salt,

an antistatic agent such as dialkyl type quaternary ammonium salt, a surface modifier such as fine-particle zeolite, are admixed and granulated under stirring, or they are kneaded, extruded and granulated by crushing to give the objective detergent composition having excellent fluidity and solubility at an elevated temperature and humidity.

COPYRIGHT: (C)1997,JPO